

L21: Entry 73 of 83

File: DWPI

Jan 18, 1984

DERWENT-ACC-NO: 1984-051490

DERWENT-WEEK: 198409

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TITLE: Epoxy! resin compsn. for sealing semiconductors - contg. hardener, fillers, and surface treating agent contg. hydrophobic gp.-contg. silane cpds. and silane coupler

PATENT-ASSIGNEE:

ASSIGNEE

CODE

MITSUBISHI ELECTRIC CORP

MITQ

PRIORITY-DATA: 1982JP-0119378 (July 7, 1982)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 59008715 A	January 18, 1984	N/A	005	N/A
JP 87018565 B	April 23, 1987	N/A	000	N/A

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
JP59008715A	July 7, 1982	1982JP-0119378	N/A

INT-CL (IPC): C08G 59/18; C08K 5/54; C08L 63/00; H01B 3/40; H01L 23/30

ABSTRACTED-PUB-NO: JP59008715A

BASIC-ABSTRACT:

Compsns. contain (1) epoxy resins, (2) hardeners, (3) inorganic fillers and (4) surface-treating agent consisting of (4-a) at least 1 silane cpd. contg. hydrophobic gp. in mol of formula $\text{RSi}(\text{OR})_3$, $\text{RR}'\text{Si}(\text{OR})_2$ or $\text{RR}'\text{R}''\text{Si}(\text{OR})$ and (4-b) silane coupler of formula $\text{YSi}(\text{OR})_3$ in wt. ratio of (4-a)/(4-b) of 0.3-10, in amt. of 0.15-2 wt.% of (3) (where R, R', R'' are 1-6C alkyl or phenyl; R1 is 1-5C alkyl; Y is oxirane ring-contg. monovalent organic gp.).

Compsn. has excellent moisture resistance and chemical bonding properties.

(4-a) includes, e.g. methyltrimethoxysilane, butyltrimethoxysilane, triphenylmethoxysilane. (4-b) includes, e.g. gamma-glycidoxypropyl trimethoxysilane, beta-(3,4-epoxycyclohexyl) ethyltrimethoxysilane. (3) includes, e.g. crystalline silica powder, glass fibre, alumina. Amt. of (3) used is 100-600 pts. wt. per 100 pts. wt. (1). (1) includes, e.g. bisphenol A epoxy resin, cresol novolak epoxy resin. (2) includes pref. methylhexahydrophthalic anhydride, methyltetrahydrophthalic anhydride.

CHOSEN-DRAWING: Dwg.0/0

TITLE-TERMS: POLYEPOXIDE RESIN COMPOSITION SEAL SEMICONDUCTOR CONTAIN HARDEN FILL SURFACE TREAT AGENT CONTAIN HYDROPHOBIC GROUP CONTAIN SILANE COMPOUND SILANE COUPLE

DERWENT-CLASS: A21 A85 E11 L03 U11 X12